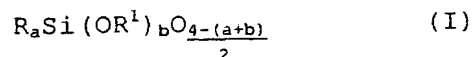


## Claims:

1. The use of antimisting additives in crosslinkable  
 5 silicone coating compositions for reducing the  
 formation of aerosol, characterized in that use is  
 made as antimisting additives of alkenyl-functional  
 siloxane copolymers containing

10 (a) siloxane units of the formula



where R is identical or different,  
 unhalogenated or halogenated hydrocarbon  
 radicals having from 1 to 18 carbon atoms per  
 radical,

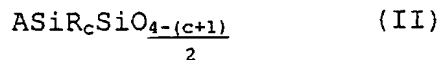
15  $R^1$  is identical or different alkyl radicals  
 having from 1 to 4 carbon atoms per radical,  
 which may be substituted by an ether oxygen  
 atom,

a is 0, 1, 2 or 3,

20 b is 0, 1, 2 or 3

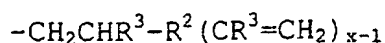
and the sum a+b is not greater than 3,

(b) per molecule at least one siloxane unit of the  
 formula



25 where R is as defined above,  
 c is 0, 1 or 2,

A is a radical of the formula



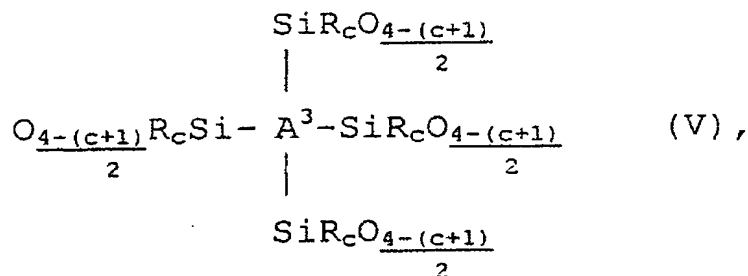
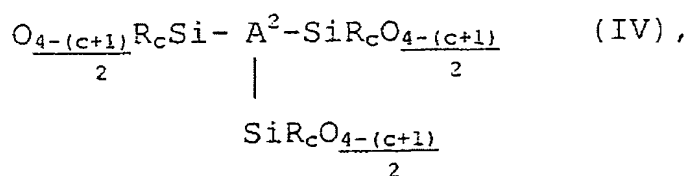
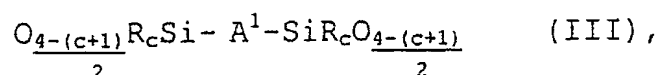
where  $\text{R}^2$  is a divalent, trivalent or tetravalent hydrocarbon radical having from 1 to 25 carbon atoms per radical,

$\text{R}^3$  is a hydrogen atom or an alkyl radical having from 1 to 6 carbon atoms per radical, and

$x$  is 2, 3 or 4,

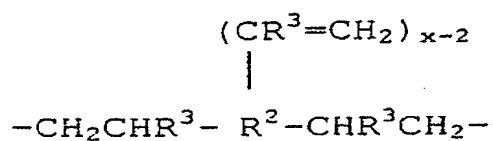
and

(c) per molecule on average at least one unit selected from the group consisting of units of the formulae



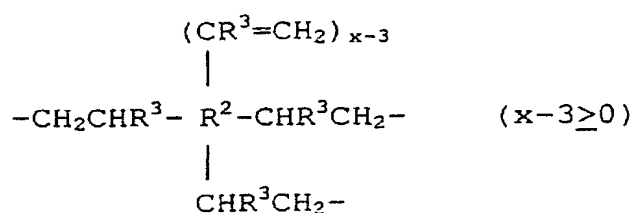
where  $\text{R}$  and  $c$  are as defined above,

$\text{A}^1$  is a radical of the formula



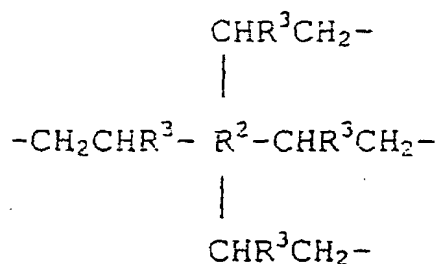
where  $\text{R}^2$ ,  $\text{R}^3$  and  $x$  are as defined above,

$\text{A}^2$  is a radical of the formula



5 where  $\text{R}^2$ ,  $\text{R}^3$  and  $x$  are as defined above, with the proviso that  $\text{R}^2$  is not a divalent hydrocarbon radical, and

$\text{A}^3$  is a radical of the formula



10 where  $\text{R}^2$  and  $\text{R}^3$  are as defined above, with the proviso that  $\text{R}^2$  is not a divalent or trivalent hydrocarbon radical.

2. The use as claimed in claim 1, characterized in that alkenyl-functional siloxane copolymers used include

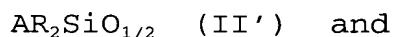
those containing

(a) siloxane units of the formula



5

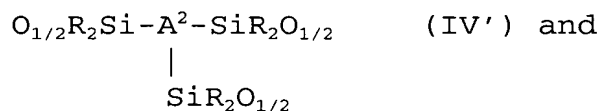
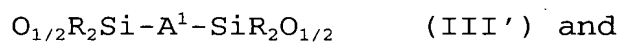
(b) per molecule on average more than one siloxane unit of the formula



10

(c) per molecule on average at least one unit selected from the group consisting of units of the formulae

15



20

where R, A, A<sup>1</sup> and A<sup>2</sup> are as defined in claim 1.

3. The use as claimed in claim 1 or 2, characterized in that the radical R<sup>3</sup> is a hydrogen atom.

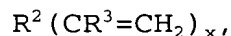
25

4. The use of an antimisting additive in a crosslinkable silicone coating composition for reducing the formation of aerosol, characterized in that it comprises using as antimisting additive alkenyl-functional siloxane copolymers preparable

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by reacting organic compound (1) containing at least two aliphatic double bonds, of the general formula

35



where R<sup>2</sup> is a divalent, trivalent or tetravalent

hydrocarbon radical having from 1 to 25 carbon atoms per radical,

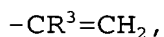
$R^3$  is a hydrogen atom or an alkyl radical having from 1 to 6 carbon atoms per radical, and

5         $x$  is 2, 3 or 4

with organopolysiloxane (2) having on average more than one Si-bonded hydrogen atom per molecule

10        in the presence of catalyst (3) which promotes the addition of Si-bonded hydrogen onto aliphatic double bond,

the ratio of aliphatic double bond in organic compound (1) to Si-bonded hydrogen in the organopolysiloxane (2) being such that alkenyl-functional siloxane copolymers having on average  
15        more than one alkenyl group per molecule, of the formula



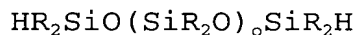
where  $R^3$  is as defined above,  
20        are obtained.

5.        The use as claimed in claim 4, characterized in that said organic compound (1) comprises 1,2,4-trivinylcyclohexane.

25

6.        The use as claimed in claim 4 or 5 characterized in that said organopolysiloxane (2) is of the general formula

30



where  $R$  is as defined in claim 1 and  $o$  is an integer from 50 to 1000.

35        7.        The use as claimed in claim 4, 5 or 6, characterized in that the ratio employed of aliphatic double bond

in organic compound (1) to Si-bonded hydrogen in the organopolysiloxane (2) is from 1.5:1 to 3.0:1.

- 5 8. The use as claimed in any of claims 1 to 7, characterized in that said crosslinkable silicone coating composition comprises
- (A) organosilicon compounds having radicals containing aliphatic carbon-carbon multiple bonds,
  - 10 (B) organosilicon compounds containing Si-bonded hydrogen atoms,
  - (C) catalysts which promote the addition of Si-bonded hydrogen onto aliphatic multiple bond, and if desired
  - 15 (D) inhibitors.
9. A crosslinkable silicone coating composition featuring reduced aerosol formation, comprising
- 20 (X) antimisting additives as set forth in any of claims 1 to 7,
  - (A) organosilicon compounds having radicals containing aliphatic carbon-carbon multiple bonds,
  - (B) organosilicon compounds containing Si-bonded hydrogen atoms,
  - 25 (C) catalysts which promote the addition of Si-bonded hydrogen onto aliphatic multiple bond, and if desired
  - (D) inhibitors.
- 30 10. A shaped body produced by crosslinking the composition of claim 9.
11. The shaped body of claim 10, characterized in that it is a coating.
- 35 12. The shaped body of claim 10, characterized in that

it is a coating which repels tacky substances.

13. A process for producing coatings by applying a crosslinkable composition as claimed in claim 9 to  
5 the surfaces that are to be coated and then crosslinking the composition.
14. A process for producing coatings which repel tacky substances by applying a crosslinkable composition  
10 as claimed in claim 9 to the surfaces that are to be made repellent to tacky substances and then crosslinking the composition.